



ecology and environment, inc.

108 SOUTH WASHINGTON, SUITE 302, SEATTLE, WASHINGTON 98104, TEL. 206-624-9537

International Specialists in the Environmental Sciences

PASSF
Original
1.4u
1/8/85

PRELIMINARY SITE INSPECTION
REPORT OF RESOURCE RECOVERY
CORPORATION
PASCO, WASHINGTON

TDD R10-8408-22

Report Prepared By: Ecology and Environment, Inc.
Project Leader: Christopher Nadler
Date: January 8, 1985

Submitted To: J.E. Osborn, Regional Project Officer
Field Operations and Technical Support Branch
U.S. Environmental Protection Agency
Region X
Seattle, Washington



PRELIMINARY
SITE INSPECTION REPORT

Resource Recovery Corporation
TDD R10-8408-22

Site Name/Address

Resource Recovery Corporation
Pasco Sanitary Landfill
Kahlotus Road and Highway 12
Pasco, WA 99301

Investigation Participants

Peter Evers, Ecology and Environment, Inc. (E&E), (206) 624-9537
Rich Brooks, Ecology and Environment, Inc. (E&E), (206) 624-9537
Chris Nadler, Ecology and Environment, Inc. (E&E), (206) 624-9537
Mike Gallagher, Washington Department of Ecology (WDOE),
Environmentalist II, (206) 459-6516

Principal Site Contacts

Larry Dietrich, Owner and Operator,
Pasco Sanitary Landfill, (509) 547-4802
John Zillich, Project Manager, J-U-B Engineers (JUB),
(509) 783-2144
Ron West, Operator, Resource Recovery Corp., (206) 767-0355

Date of Inspection

9/12/84 0800 hrs.

1.0 Introduction

Resource Recovery Corporation (RRC)/Pasco Sanitary Landfill (PSL) has been identified by the U.S. Environmental Protection Agency (EPA) Region X and WDOE from preliminary assessment screening as requiring additional information to accurately profile the nature and extent of past waste disposal activity at the site. E&E has been requested by EPA under Technical Directive Document No. R10-8408-22 to conduct a site inspection and evaluate the facility's status within the Agency's Uncontrolled Hazardous Waste Site Program. This report summarizes the results of E&E's preliminary site inspection and is divided into the following sections:

- o Site Location
- o Hydrogeology
- o Disposal Practices
- o Past Investigations
- o Observations

2.0 Site Location

The PSL is located 1.5 miles northeast of Pasco, Washington in the SW 1/4 of Section 5 and the NW 1/4 of Section 22, Township 09 north, Range 30 east, Willamette Meridian, Franklin County (Figure 2.1). The PSL has been operated as a landfill since 1956 (1). The facility has received primarily municipal wastes with the exception of a period from 1972 to 1980 when it was also operated as a regional hazardous waste site.

The site has been owned and operated by Larry Dietrich since January 1981. Records indicate that John Dietrich owned the site from 1956 to 1981. The site was leased to the Resource Recovery Corporation during the time period when it was operated as a regional hazardous waste site (1).

The average elevation of the site is 410 feet above mean sea level (MSL) with the land sloping approximately 1 to 3 percent to the west-southwest. The land in the general vicinity of the site is rural (population approximately 35 people within a 1 mile radius) intermixed with irrigated agricultural fields and range land.

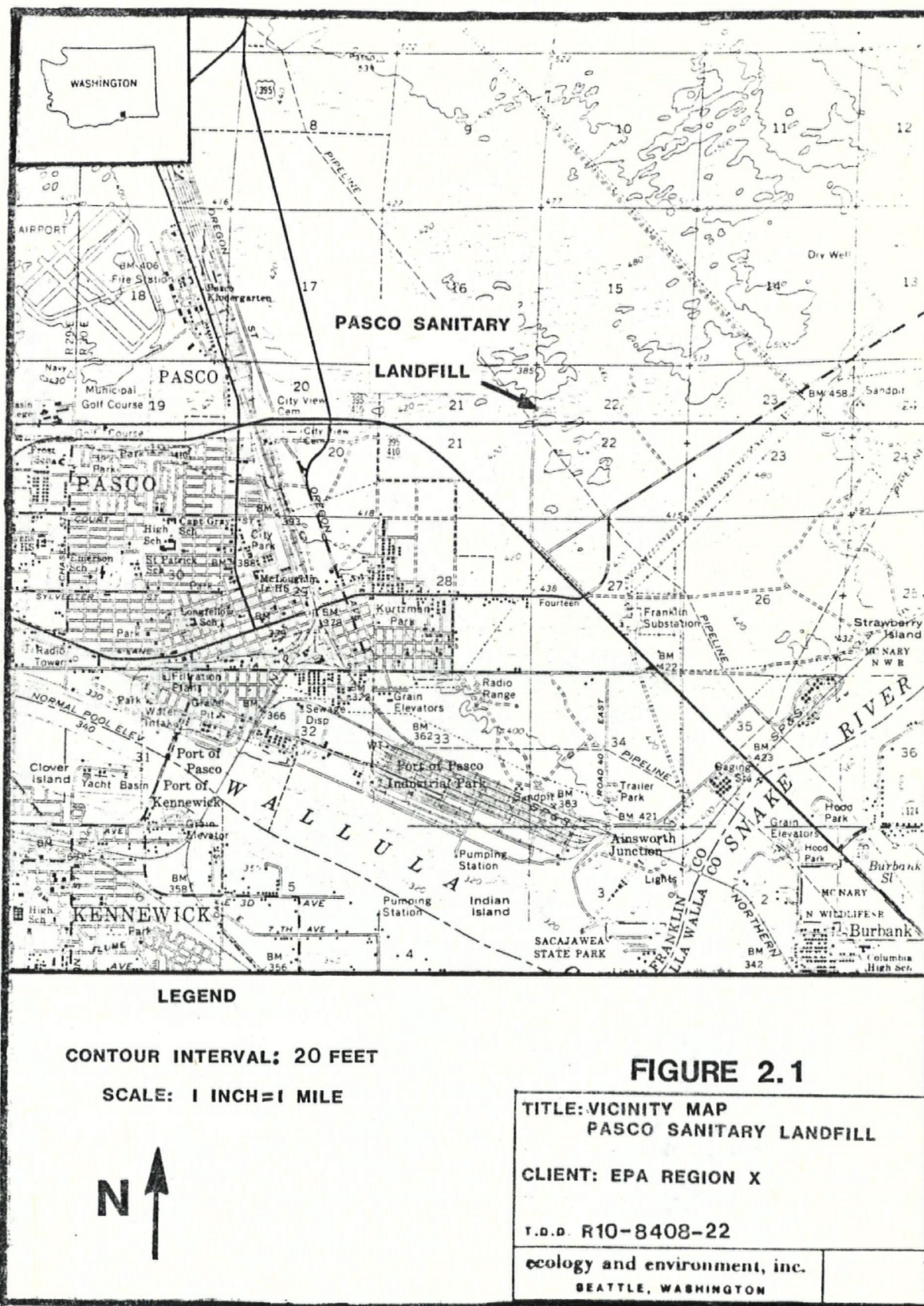
3.0 Hydrogeology

The generalized description of the geologic units underlying PSL is presented in Table 3.1.

TABLE 3.1
DESCRIPTION OF GEOLOGIC UNITS (2,3,4)

Geologic Unit Sub-Unit	Depth (feet)	Description	Permeability (cm/sec)
Eolian Sand and Silt	surface	Light brown. Very fine sands and silts.	10^{-3} - 10^{-5}
Touchet Formation	0-40	Light to medium brown. Very fine to medium grained sands. Occasionally slight to very silty.	10^{-3} - 10^{-5}
Pasco Gravels	40-60	Dark grey. Locally fine to coarse grained sands with occasional gravel.	$>10^{-3}$
Ringhold Formation Ringhold Sands	60-100	Dark grey. Medium to coarse grain with gravel. Gravel increasing and getting coarser with depth.	$>10^{-3}$
Ringhold Gravels	100-110	Tan gravel with sand.	$>10^{-3}$
Ringhold Clays	>110 -140	Blue clay.	
Yakima Basalt	>140	Basalt	10^{-2} - 10^{-5}

COPY FROM



Groundwater beneath the site occurs in the Yakima Basalt sequence and the overlying sedimentary materials. The disposal site will have a potential impact only on the groundwater in the sedimentary materials (2). The depth to the water table aquifer is approximately 55 feet below the average land surface (approximately 355 feet MSL), thus the surface of the groundwater tops the Ringhold Sands and is in the Pasco Gravels (2). Groundwater movement is in a general southwesterly direction toward the Columbia River (Figure 3.1). The major use of groundwater in the area is crop irrigation. The site has a semi-arid climate with an overall negative water budget of approximately 32-inches per year (3). The two year 24-hour rainfall is 0.8-inches, with July being the driest month having less than 0.2-inches of rainfall (6).

4.0 Disposal Practices

The PSL site was operated as an open burning dump from 1956 to 1971 (1). The primary wastes accepted were municipal wastes which were dumped on the ground surface and periodically burned. In 1971 the operation was changed from an open burning dump to a sanitary landfill; the burning activity stopped and the refuse was periodically covered with soil (1).

Resource Recovery Corporation leased a portion of the landfill in 1972 from the landowner John Dietrich and began operating a regional hazardous waste site. The site was managed by Larry Dietrich (John's son) as an employee of the corporation. The operator accepted and disposed of hazardous wastes in sub-sites from 1973 through 1981 under WDOE Permit #5301 issued March 21, 1973. The majority of hazardous wastes were accepted from 1972 to 1974; Table 4.1 summarizes the types, quantities and disposal locations (if known) for this period. The sanitary landfill operation also continued during the period of time Resource Recovery leased the site. In addition, in 1974 a sewage evaporation lagoon was constructed for the disposal of septic tank wastes (Figure 3.1).

Resource Recovery Corporation operated the site until January 1981, at which time the operation lease terminated and all interests RRC had in the operation reverted to the Dietrichs. Larry Dietrich has operated the site as a sanitary landfill since 1981.

5.0 Past Investigations

5.1 WDOE Investigation

In September 1973, the WDOE ordered an investigation of RRC operation at PSL. This was initiated because of the concerns of local farmers and the WDOE relating to the potential effects of the materials buried at the site on the local agricultural crops. The investigation included a site visit to ascertain current site conditions, waste types disposed of at the site and their potential impact on groundwater, as well as possible air contamination. No samples of the wastes or groundwater were collected or analyzed by the WDOE.

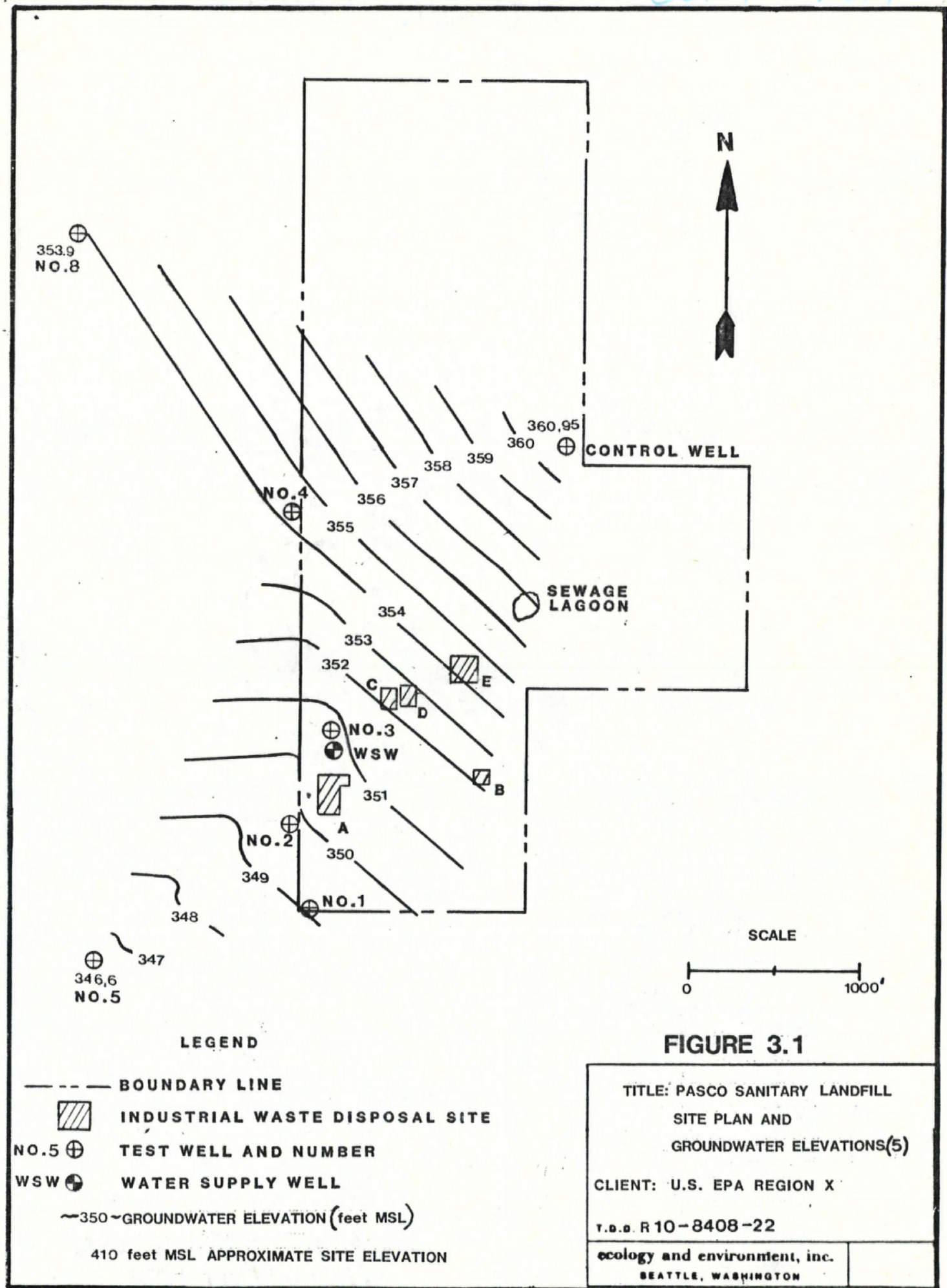


TABLE 4.1
WASTE QUANTITIES DISPOSED OF
AT PSL BY RRC

Location(5)	Description(7) (Size*/Lining)	Waste Type(2,8)	Estimated Quantity (2,5,8)	Units
Site A	100'x100' bottom unlined top lined	acids	544	drums
		aromatic tars	160-248	drums
		carcinogenics (unspecified)	9	drums
		caustics	8,774	drums
		cedimum	11	drums
		metal finishing	244-304	drums
		oil sludge	433	drums
		paint	10,258-24,200	drums
		pesticides	425	drums
		pesticide containers (empty)	791-863	drums
Site B	50'x50' bottom unlined top lined	2,4-D manufacturing	2,011-5,080	drums
Site C	75'x75' bottom unlined top lined	acids	7,000	gallons
		acid metal cleaning	2,301,560	pounds
		lime phenol	684,967	gallons
		metal cleaning	185,162	gallons
		metal finishing	17,000-35,724	gallons
		metal finishing	1,460,602-1,949,652	pounds
Site D	75'x75' bottom unlined top lined	aromatic tar	499,270	pounds
		cutting oil	76,350-84,300	gallons
		fertilizer manufacturing	228,288	pounds
		oily sludge	6,000-66,340	gallons
		paint	72,475-497,418	pounds
		paint	66,516-95,711	gallons
		plywood resin	1,393,380-2,215,440	pounds
		solvents	12,648	gallons
Site E	unknown bottom and top lined	barium with mercury	10,500-11,582	tons
Unknown	unknown	acid sludges	1,000	gallons
		acid wash solution	312,350	pounds
		benzoic acid and tar	176,000	pounds
		chemistry lab reagents	1	drum
		chrome rinse water	700,901	pounds
		DCP tar	8,790	gallons
		etching solution	1,914	barrels
		lime sludge	80-160	drums
		MCPA bleed	104,318-327,000	gallons
		MCPA tar	2,965-3,037	drums
			939	drums
			2,813	barrels
			680	pails
		metal casing wastes	3,300-5,760	drums
		misc. lab chemicals	29	sm. containers
		NH ₄ ⁺ and NaOH		
		chemical solutions	17,238	gallons
		oily sludge	166,680	pounds
		other miscellaneous	435	drums
		pesticide containers	1,045	each
		resin manufacturing	392,553	gallons
		solid caustic soda	44,550	pounds
		wood treatment/preservative	294,662	gallons
			238	drums

*The depths of the burial sites are unknown. All linings are 4 mil polyethylene and all sites are covered with soil.

The WDOE prepared a report which was published in December 1973. In their report, WDOE stated that the site was in an excellent location for ground disposal of industrial solid wastes, if the proper safeguards are observed. Further, that the arid climate prevents the leaching of solid wastes disposed into the ground and is conducive to on-site concentration and desiccation of liquid wastes. They also concluded that since the water table is relatively shallow, it is not acceptable to dispose of liquid wastes directly to the ground in unlined pits or trenches. The state decided that the probability of air pollution at the site was considered to be low. Figure 5.1 explains the site structure during this WDOE investigation. The report concluded the following recommendations:

- o all materials received for disposal at the site shall be recorded as to the type, chemical composition and quantity;
- o abandoned disposal sites must be permanently monumented;
- o all trenches intended for the disposal of hazardous wastes should be lined.

5.2 J-U-B Engineers Reports

J-U-B Engineers have been contracted by the operator of the PSL as consultants to plan and implement the groundwater quality program at the PSL site. The engineering firm has completed 2 major reports on the PSL.

J-U-B Engineers first report (June 1981) responded to several issues which the WDOE raised in a letter to the PSL on 18 February 1981. The report included the following (9):

- o a discussion of the percolation of septic wastes and their impact on hazardous wastes which were disposed of on-site;
- o documentation procedures of septic wastes received at PSL;
- o direction and velocity of groundwater flow;
- o current groundwater monitoring program;
- o estimated the transmissivity and permeability of the water table aquifer at the site.

The authors concluded that:

- o the industrial waste disposal sites are not being saturated by lateral movement of waste waters from the sewage lagoons;
- o the groundwater flow direction and quality have been determined near the landfill site but an additional well is needed at the southern boundary to verify flow;
- o a groundwater monitoring program has been established to determine current and future impacts of site operations.

In July 1983, J-U-B Engineers published a second report on the PSL which was a summary of past quarterly groundwater sampling. This report included:

- o a summary of the construction of six groundwater monitoring wells completed in January 1982 (Figure 5.2);
- o tentatively identified the direction of groundwater flow;
- o summarized the analytical results of quarterly groundwater samples collected by J-U-B Engineers from January 1982 to March 1983;
- o compared the groundwater quality to health effect limits.

J-U-B Engineering concluded the following:

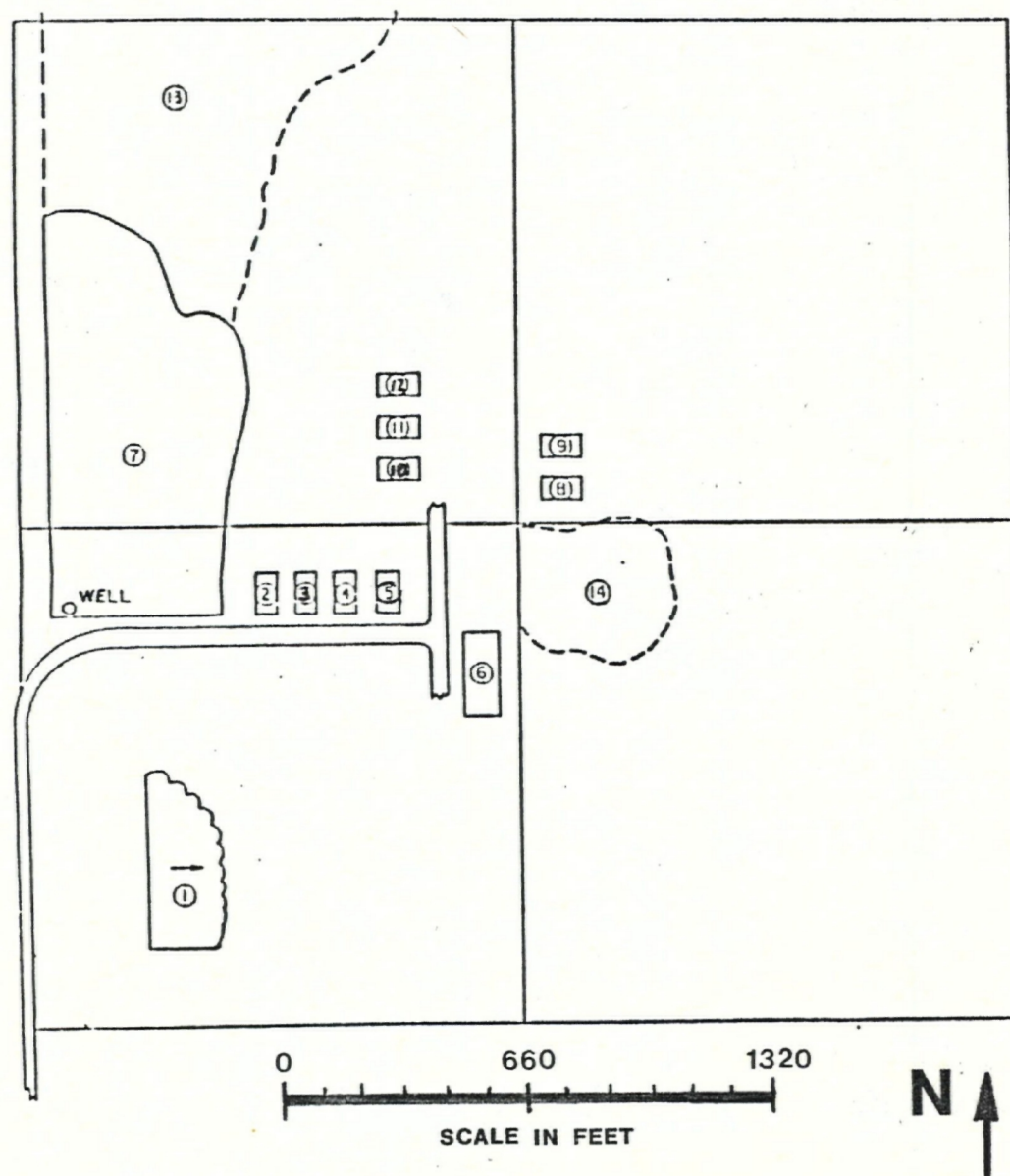
- o existing monitoring wells are located in such a manner that they will detect any leachate migration from the industrial and solid waste areas and the sewage evaporation lagoon;
- o the wells are constructed to obtain water from the upper 20 feet of the water table aquifer where contaminants from the landfill would be most readily observed;
- o sampling results for health-effect related parameters show concentration to be largely below detection limits and in all cases below the EPA allowable contaminant levels.

There are a number of discrepancies between the disposal sub-site descriptions in Figure 5.1 and 5.2. The exact size and location of each disposal sub-site is in question as is the identification numbering system. Table 5.1 is a cross reference of both parties numbering systems.

TABLE 5.1
CROSS REFERENCE OF J-U-B AND WDOE
DISPOSAL SUB-SITE NUMBERING SYSTEM (10)

J-U-B	WDOE	Description
A	1	Disposal of containerized wastes
B	6	Disposal of containerized herbicide wastes
C and D	2 to 5	Evaporation ponds
E	8 and 9	Unlined trenches for disposal of chloralkali sludges
F ₁	NI	Solid Waste fill area
F ₂	7	Solid Waste fill area
NI	10 to 14	Never used

NI - Not Identified



Location (See Map)	Description	Amount
1	For disposal of containerized wastes such as: Paint wastes (sludge, pigments, resins, colors) Empty pesticide containers Wood treatment wastes Etching solutions Metal casting wastes	10,258 drums 800 drums 1,100 drums 160 drums 3,300 drums
	All wastes are in containers and buried under 5 feet of soil. There have been no known liquid discharges from this location.	
2	An unlined pond for evaporation of water from simple wastes such as: Lime sludge and ammonia water	327,000 gal.
3	A lined pond for evaporation of water from: chrome plating wastes	8,790 gal.
4	A lined pond for evaporation of water from: miscellaneous liquids - not yet used to any extent	
5	A roughed out pond for later use. Being used as temporary storage for chlor-alkali sludge pending preparation of trenches 10, 11, and 12.	
6	For disposal of containerized herbicide wastes such as: 2,4-D tar MCPA Bleed other miscellaneous	2,011 drums 3,037 drums 435 drums
	The drums are covered with 5 feet of soil. There have been no known discharges from this location.	
7	The currently active landfill operation.	
8, 9	Unlined trenches for temporary disposal of chlor-alkali sludge. The sludge will be moved to lined trenches 10, 11, and 12.	
10, 11, 12	Proposed site for disposal of chlor-alkali sludges. The lined trenches will be constructed as outlined in Figure 2.	
13, 14,	Space for future landfill operations.	

FIGURE 5.1

AREAS OF DISPOSAL OCTOBER 1973 (2)

COPY THIS ONE

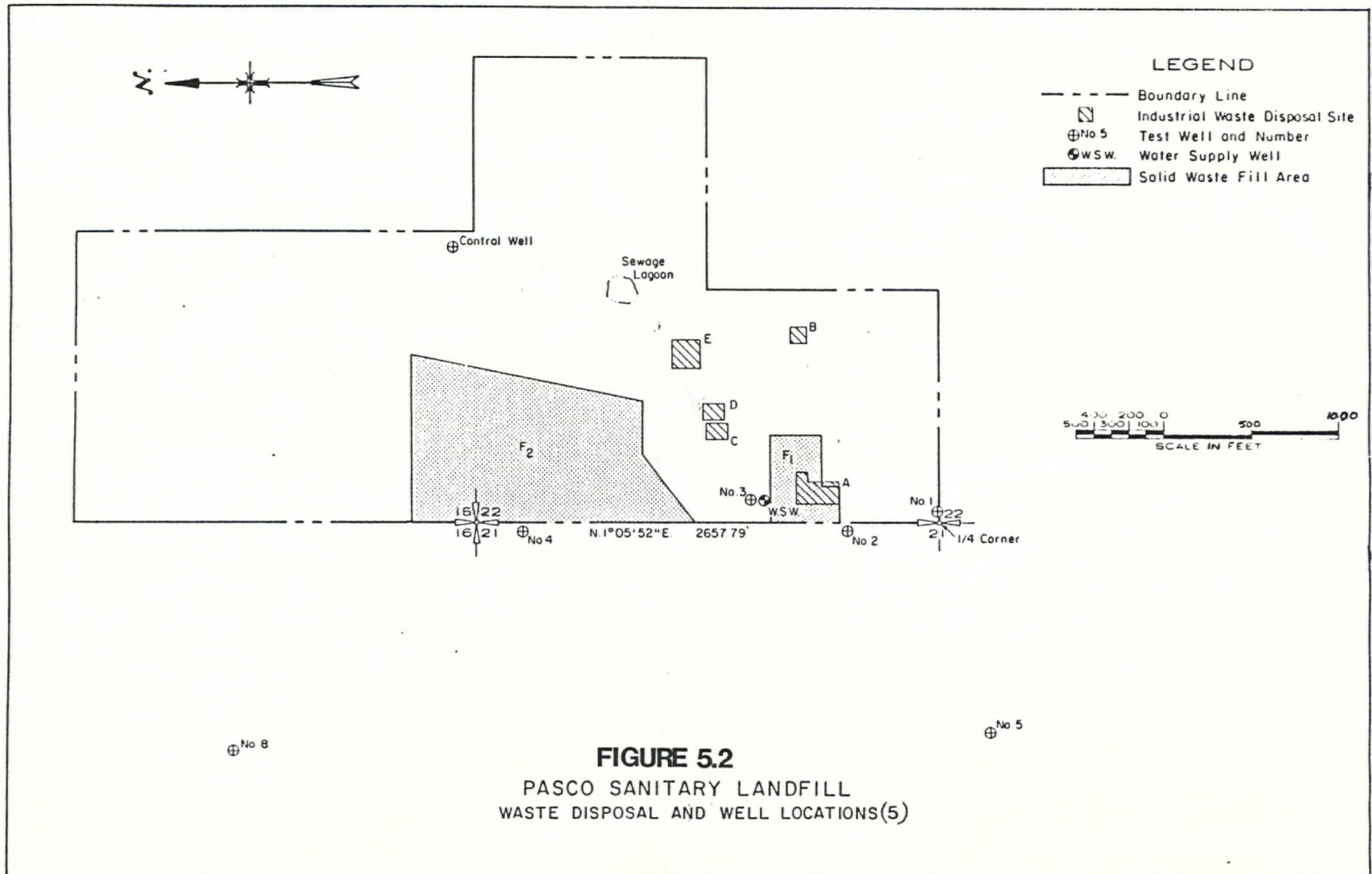


FIGURE 5.2
PASCO SANITARY LANDFILL
WASTE DISPOSAL AND WELL LOCATIONS(5)

5.3 Preliminary Assessments (PA) and Site Inspections (SI)

Table 5.2 summarizes the PA's and SI's which have been conducted to date.

TABLE 5.2
SUMMARY OF PA AND SI ACTIVITIES (11)

Activity	Date	Responsible Agency
Identification of Potential Problem	07-79	EPA
SI	07-79	EPA
PA	08-79	EPA
SI	04-80	WDOE
PA	04-84	JRB Associates
Hazard Ranking		
System Score	04-84	Unknown
SI	09-84	E&E

6.0 Observations

On September 12, 1984, a site inspection was conducted at PSL. The site inspection began at 0800. Mike Gallagher (WDOE), Larry Deitrich (PSL), John Zillich (J-U-B Engineering), Peter Evers (E&E), and Richard Brooks (E&E), were present. The inspection included a discussion about background information, a site tour, and sample collection. It was noted during the site tour that no drums or hazardous wastes were visible at the surface and no color stains or leachate seeps were observed.

Three groundwater samples were collected during the inspection. The results of the analysis of these samples are contained in Appendix A. This data indicates that there is no organic contamination from the site reaching the groundwater which was sampled. The inorganic analysis revealed higher levels of heavy metals in the well which has been identified as the control well (Table 6.1).

TABLE 6.1
COMPARISON OF SELECTED HEAVY METALS (ug/l)

Metal	Upgradient Well	Well No. 3	EPA Recommended Level*
Aluminum	102,000	41,500	---
Arsenic**	39	28	50
Barium	1,631	785	1,000
Beryllium	7	5 U	1.17
Cadmium	1.9	1 U	10
Chromium	106	46	50
Cobalt	170	5 U	---
Copper**	280	120	1,000
Iron	199,900	97,450	---
Lead	160	70	50
Manganese	4,380	1,694	---
Nickel**	162	63	13.4
Vanadium	302	200 U	---
Zinc	514	207	5,000

*Compiled from a) National Interim Primary Drinking Water Regulations, EPA Office of Water Supply, 1979.

b) Water Quality Criteria Documents, Federal Register, Vol. 45, No. 231, November 1980.

U - Under detection limit (listed next to value).

** - Refer to cover memorandum to the inorganic data for discussion of these values.

This data suggests that:

- o the actual direction of groundwater flow is possibly not in the direction which has been tentatively identified;
- o hazardous wastes may have been disposed of upgradient of the control well which have not been identified in past reports and may have migrated to this well.

Because of this uncertainty, it can not be determined if the inorganic contamination is originating on or off-site.

7.0 Discussion

One factor that may effect the quality of analytical data of the groundwater samples collected from the PSL is the monitoring well design (Figure 7.1). The wells are screened at 2 intervals separated by approximately 15 feet. The water samples are obtained by placing a

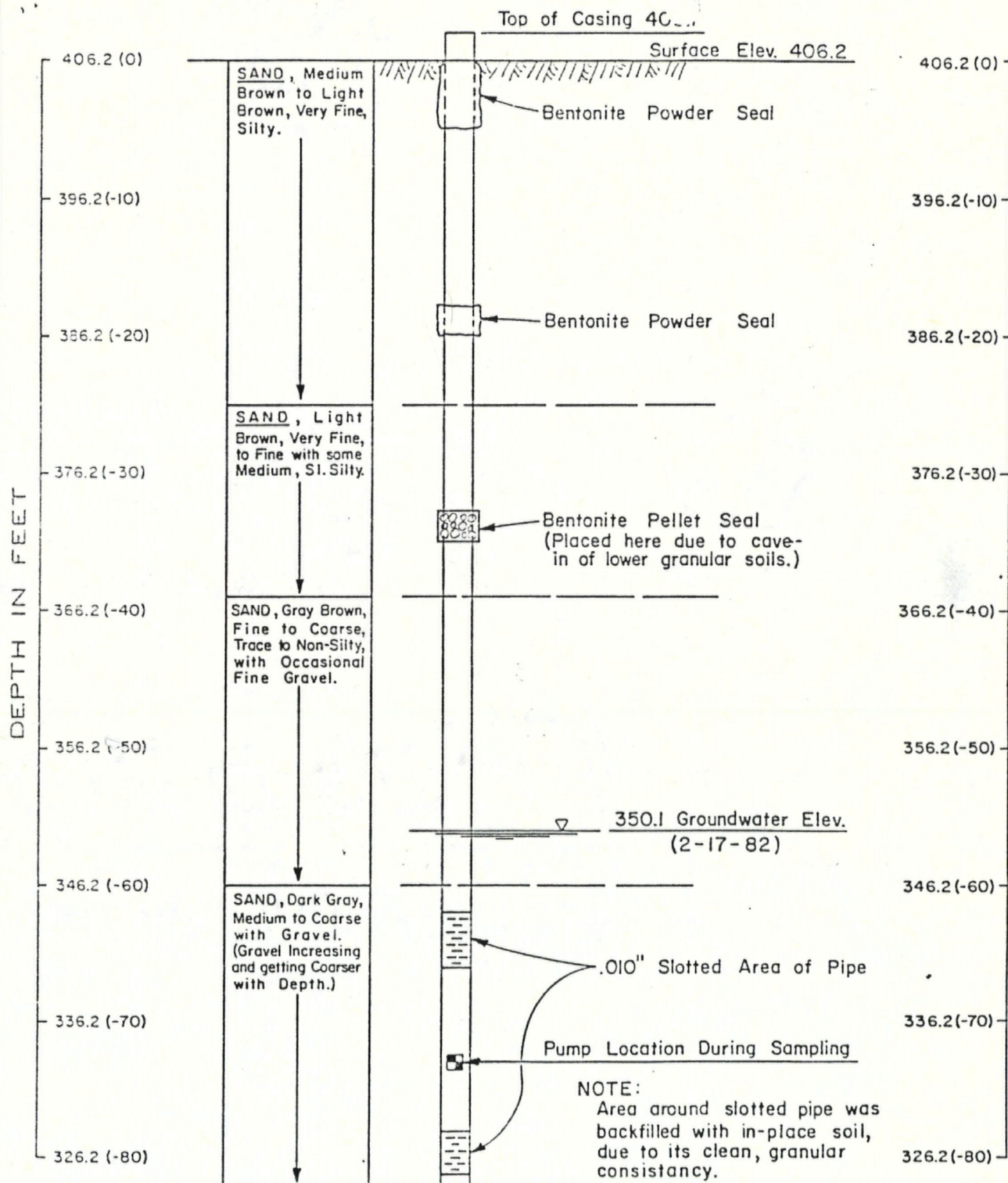


FIGURE 7.1
WELL NO. 2 (5)
INSTALLED 1-14-82

*Copy from
this one*

pump halfway between these screens. Utilizing this design there is no assurance that:

- o equal amounts of water are extracted from each screened interval;
- o the depth from which the sample is being collected is accurately known;
- o the concentrations of contaminants are representative of the actual groundwater conditions due to the potential unequal volumes of water are extracted from each screened interval.

It is difficult to compare previous groundwater analytical data available and establish possible trends of contamination at the PSL. The samples collected by J-U-B Engineers were analyzed for different parameters than those collected by E&E. The analytical data which is contained in the J-U-B report is incomplete in that the units of measurement are not given. The exception to this are the metals data which are contained in Table 7.1, these metals were analyzed for by both firms.

TABLE 7.1
COMPARISON OF PREVIOUS ANALYTICAL DATA METAL (ug/l)

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Chromium	Lead
Upgradient	17-18/02/84	10 U	100 U	1 U	5 U	5 U
	12/09/84	39**	1,631	1.9	106	160
3	17-18/02/84	10 U	100 U	1 U	5 U	5 U
	12/09/84	28**	785	1 U	46	70

U - Under detection limit (listed next to value)

** - To cover memorandum to the inorganic data for discussion of these values

It can be interpreted from the data contained in Table 7.1 that the levels of metal contamination have increased between samplings. Records of materials disposal of on-site indicate that at least 3 of the 5 metals described in Table 7.1 were disposed at the PSL. These include: Barium, Chromium, and Lead.

Evaluation and Recommendation - Resource
Recovery Corporation

Based on existing data and documentation, further investigation is needed to assess the potential hazard associated with this site. Because of the toxic nature of many of the compounds (e.g. 2,4-D, MCPA) which have been disposed of at PSL and the observed increase of contaminants in the on-site and control wells, the following recommendations should be considered:

- 1) Further investigation should be carried out to determine the validity of the site's disposal records. There are a number of variations relating to the quantities and types of wastes which have been disposed of at the PSL.
- 2) Resample all of the wells on-site and analyze for the compounds identified on the EPA Priority Pollutant List including dioxins.
- 3) Monitor the wells and determine whether or not seasonal fluctuations (due to local irrigation demands) of groundwater flow exist which could transport contaminants toward the on-site control well.
- 4) Collect subsurface soils samples adjacent to all waste disposal areas to determine whether or not wastes are leaching from these areas.
- 5) Contact the chemical toilet firm which is disposing waste water in the sewage lagoon and determine if any chemicals which they are using are hazardous.

These recommendations should be pursued on a medium priority basis.

REFERENCES

1. Doug Hansen, Director, EPA Air and Hazardous Materials Division; Letter to the EPA files; August 2, 1979.
2. Resource Recovery Corporation Industrial Disposal Site Evaluation, Report by Washington Department of Ecology December 1973 contained in the Region X EPA ERRIS site files.
3. HRS User's Manual (draft) 10 June 1982, document developed for U.S. Environmental Protection Agency by the Mitre Corporation (pg. 15).
4. Basalt Waste Isolation Project, Annual Report - Fiscal Year 1980, RHO-BW1-80-100, document prepared for U.S. Department of Energy under contract DE-AC06-77RL01030 by Rockwell International.
5. Summary Report - Groundwater Quality in the Vicinity of the Pasco Landfill, by J-U-B Engineers, Kennewick, Washington, July 1983. Contained in the Region X U.S. EPA ERRIS site files.
6. The Climatic Atlas of the United States, U.S. Department of Commerce, June 1968 (reprinted by NOAA, 1979).
7. Personal communication with Larry Dietrich during site inspection.
8. EPA Files on RRC. Monthly wastes accepted, reports from RRC to WDOE, May 1973 to December 1974.
9. Evaluation of the Pasco Sanitary Landfill Waste Disposal Practices, J-U-B Engineers, Kennewick, Washington, June 1981.
10. Telephone Conversation. Mike Gallagher, Environmentalist II, WDOE, Chris Nadler, FIT Investigator, E&E, Seattle, 11 December 1984, 135D.
11. EPA files.

APPENDIX A

QUALITY ASSURANCE MEMOS AND ANALYTICAL DATA SHEETS
RESOURCE RECOVERY CORPORATION, PASCO, WASHINGTON

CASE NO.: 3206

SITE INSPECTION - 9/12/84

ECOLOGY AND ENVIRONMENT, INC., SEATTLE



ecology and environment, inc.

108 SOUTH WASHINGTON, SUITE 302, SEATTLE, WASHINGTON 98104, TEL. 206-624-9537

International Specialists in the Environmental Sciences

M E M O R A N D U M

DATE: November 7, 1984

TO: John Osborn, FIT RPO
EPA, Region X

THRU: Dave Buecker, FIT RPM
E&E, Seattle

FROM: Jim Farr, Senior Chemist
E&E, Seattle

SUBJ: QA of Sample Results for Case 3206

I have finished my review of data for Case 3206. Chemtech analyzed three water samples for inorganics. I believe the data to be acceptable except for the following comment:

Duplicate data for arsenic, copper, and nickel gave high RPD's. I have starred all results on the data sheets that are associated with the duplicate. The starred values (*) suggest a larger imprecision for measuring that particular element. The imprecision would suggest error of $\pm 44\%$ for arsenic, $\pm 46\%$ for copper, and $\pm 24\%$ for nickel.

Otherwise all results are as reported. Please call me if you have questions.

CC: Peter Evers
JF:pc
attachment

APPENDIX A

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 618 - Alexandria, VA 22313
703/557-2490; FTS: 8-557-2490

EPA Sample No.

MJ 9043

Date 10-24-81

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH

CASE NO. 3206

LAB SAMPLE ID. NO. G2-322-01

QC REPORT NO. 322

Elements Identified and Measured

Matrix Low Water

(ug/L) or mg/kg (Circle One)

1. Aluminum	102000	13. Magnesium	NR
2. Antimony	<20-20 u	14. Manganese	4380
3. Arsenic	39*	15. Mercury	<0.2 0.2 u
4. Barium	1631	16. Nickel	162*
5. Beryllium	7	17. Potassium	NR
6. Cadmium	Detected 1.9	18. Selenium	2
7. Calcium	NR	19. Silver	<10 10 u
8. Chromium	106	20. Sodium	NR
9. Cobalt	170	21. Thallium	<10-10 u
10. Copper	280*	22. Tin	<20-20 u
11. Iron	199900	23. Vanadium	302
12. Lead	160	24. Zinc	514
Cyanide	<10 10 u	Percent Solids	NR

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

E. Hedrick

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490; FTS: 8-557-2490

EPA Sample No.

MS 9044

Date 10-24-81

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECH

CASE NO. 3206

LAB SAMPLE ID. NO. 62-322-02

QC REPORT NO. 322

Elements Identified and Measured

Matrix Low Water

ug/L or mg/kg (Circle One)

1. Aluminum	203	13. Magnesium	NR
2. Antimony	<20 20u	14. Manganese	<10 10u
3. Arsenic	<10 10u	15. Mercury	<0.2 0.2u
4. Barium	<100 100u	16. Nickel	<40 40u
5. Beryllium	<5 5u	17. Potassium	NR
6. Cadmium	<1 1u	18. Selenium	<2 2u
7. Calcium	NR	19. Silver	<10 10u
8. Chromium	<10 10u	20. Sodium	NR
9. Cobalt	<50 50u	21. Thallium	<10 10u
10. Copper	<50 50u	22. Tin	<20 20u
11. Iron	163	23. Vanadium	<200 200u
12. Lead	<5 5u	24. Zinc	<10 10u
Cyanide	<10 10u	Percent Solids	NR

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.

MJ 9045

Date 10-24-84

INORGANIC ANALYSIS DATA SHEET

LAB NAME CHEMTECHCASE NO. 3206LAB SAMPLE ID. NO. G2-322-03QC REPORT NO. 322

Elements Identified and Measured

Matrix Lw Water

(ug/L) or mg/kg (Circle One)

1. Aluminum	<u>41500</u>	13. Magnesium	<u>NR</u>
2. Antimony	<u><20 20u</u>	14. Manganese	<u>1694</u>
3. Arsenic	<u>28*</u>	15. Mercury	<u><0.2 0.2u</u>
4. Barium	<u>785</u>	16. Nickel	<u>63*</u>
5. Beryllium	<u><5 5u</u>	17. Potassium	<u>NR</u>
6. Cadmium	<u><1 1u</u>	18. Selenium	<u>2</u>
7. Calcium	<u>NR</u>	19. Silver	<u><10 10u</u>
8. Chromium	<u>42</u>	20. Sodium	<u>NR</u>
9. Cobalt	<u><50 50u</u>	21. Thallium	<u><10 10u</u>
10. Copper	<u>120*</u>	22. Tin	<u><20 20u</u>
11. Iron	<u>97450</u>	23. Vanadium	<u><200 200u</u>
12. Lead	<u>70</u>	24. Zinc	<u>207</u>
Cyanide	<u><10 10u</u>	Percent Solids	<u>NR</u>

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager E. Hecht

R. H. Hiler



ecology and environment, inc.

108 SOUTH WASHINGTON, SUITE 302, SEATTLE, WASHINGTON 98104, TEL. 206-624-9537

International Specialists in the Environmental Sciences

MEMORANDUM

DATE: November 27, 1984

TO: John Osborn, FIT RPO, USEPA Region X

FROM: Andy Hafferty, Chemist, E&E, Seattle
J. Farr, Sr. Chemist, E&E, Seattle

THRU: D. Buecker, FIT RPM, E&E, Seattle

SUBJ: QA of Data; Case 3206 - Resource Recovery Corp.

REF: TDD R10-8410-06

The review of three water samples sent to PEDCO Environmental, Inc., Cincinnati, OH, has been completed. These samples were given a full organics analysis.

Sample numbers are J2271, J4548, and J4549.

Volatile surrogate recoveries were all within QC limits.

Half of the pesticide surrogate recoveries were outside QC limits.

Sample	Dibutyl Chlorendate (67-114)
J2271	69%
J4548	22% out
J4549 (field blank)	120% out
Lab Blank	95%

There is no explanation for the out of control recovery reported in the field blank.

Eleven out of 36 surrogate recoveries of the Semi-volatile (BNA) fraction were out of control. The samples were not re-extracted and re-analyzed as required by the CLP. The lab blank showed three out of six recoveries outside of QC limits. The field blank, J4549, had two out of six recoveries out of control. Again, there is NO explanation for these unacceptable blank results.

All pesticide matrix spike and matrix spike duplicates (MS/MSD) were within recovery (REC) and reproducibility (RPD) quality control limits.

Two out of 10 volatile MS/MSD recoveries were outside QC limits.

Number these pages starting with A-7

Seven out of 14 base/neutral MS/MSD recoveries were outside QC limits and all seven out of seven base/neutral MS/MSD RPD's were OUT of control.

Eight out of ten acid MS/MSD recoveries were outside QC limits and, including one 0 value, four out of five acid MS/MSD RPD's were OUT of control.

Methylene chloride and acetone in the volatiles lab blank and Bis (2-ethylhexyl) phthalate in the BNA lab blank were found at concentrations above the contract specified maximum.

Copies of the PEDCO lab summary sheets have been included in this report.

The laboratory was called on November 8, 1984 by Dr. James Farr (a copy of the telephone log has been included in this report) regarding missing spectra and the failure of the laboratory to carry out contract required re-extraction and re-analysis. The missing spectra have been received and added to the data package. The laboratory's response regarding the failure to re-examine the BNA fraction was that since no compounds were detected, repetitive analyses were unnecessary. The CLP clearly states that the laboratory must repeat the analyses without regard to the presence or lack of quantifiable analytes.

This is the second case of samples received from PEDCO with serious unexplained quality control anomalies. Please refer to the E&E, quality assurance memorandum dated November 2, 1984, regarding QA of Data from the Tulalip Indian Reservation, Case 3270.

The following list summarizes the recommendations regarding this data and the performance of the laboratory.

1. The Volatile and Pesticide data are acceptable.
2. The Semi-volatile data is unacceptable. If this data must be used, extreme caution should be exercised in drawing any conclusions based on these results.
3. The SMO should be notified regarding the continuing quality control problems at PEDCO Environmental, Inc.
4. PEDCO should be required to perform the work as specified in the CLP on all future work.

AH:pc
Attachments
CC: Bill Ritthaler
Arnold Gahler

USEPA-SAMPLE MANAGEMENT OFFICE
PO BOX 818 ALEXANDRIA, VA 22313

SAMPLE NO.
J2271

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO _____ DT147
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____ *AM*

CASE NO: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

VOLATILES

CONCENTRATION _____ LOW
DATE PREPARED _____ 9/13/84
DATE ANALYZED _____ 9/13/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 0.2

PPH	CASH	UG/L
(2V)	107-02-BACROLEIN	100U
(3V)	107-13-1ACRYLONITRILE	100U
(4V)	71-43-2BENZENE	5U
(6V)	56-23-2CARBON TETRACHLORIDE	5U
(7V)	108-90-7CHLOROBENZENE	5U
(10V)	107-06-21,2-DICHLOROETHANE	5U
(11V)	71-55-61,1,1-TRICHLOROETHANE	5U
(13V)	75-34-31,1-DICHLOROETHANE	5U
(14V)	79-00-51,1,2-TRICHLOROETHANE	5U
(15V)	79-34-51,1,2,2-TETRACHLOROETHANE	10U
(16V)	75-00-3CHLOROETHANE	10U
(19V)	110-75-82-CHLOROETHYL VINYLETHYR	10U
(23V)	67-66-3CHLOROFORM	5U
(29V)	75-35-41,1-DICHLOROETHENE	5U
(30V)	156-60-5TRANS-1,2-DICHLOROETHENE	5U
(32V)	78-87-51,2-DICHLOROPROPANE	10U
(33V)	10061-02-6TRANS-1,3-DICHLOROPROPENE	5U
	10061-01-0SCIS-1,3-DICHLOROPROPENE	5U
(38V)	100-41-4ETHYLBENZENE	5U
(44V)	75-09-2METHYLENE CHLORIDE	5U
(45V)	74-87-3CHLOROMETHANE	10U
(46V)	74-83-9BROMOMETHANE	10U
(47V)	75-25-2BROMOFORM	10U
(48V)	75-27-4BROMODICHLOROMETHANE	5U
(49V)	75-69-4FLUOROTRICHLOROMETHANE	5U
(50V)	75-71-8DICHLORODIFLUOROMETHANE	NA
(51V)	124-48-1CHLORODIBROMOMETHANE	5U
(85V)	127-18-4TETRACHLOROETHENE	5U
(86V)	108-88-3TOLUENE	5U
(87V)	79-01-6TRICHLOROETHENE	5U
(88V)	75-01-4VINYL CHLORIDE	10U
	67-64-1ACETONE	5U
	78-93-32-BUTANONE	5U
	75-15-0CARBON DISULFIDE	1U
	519-78-62-HEXANONE	5U
	108-10-14-METHYL-2-PENTANONE	5U
	100-42-5STYRENE	5U
	108-05-4VINYL ACETATE	5U
	1330-20-7TOTAL XYLENES	5U

PESTICIDES

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 10/4/84
PERCENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 10

PPH	CASH	UG/L
(89P)	309-00-2 ALDRIN	.005U
(90P)	60-57-1 DIELDRIN	.005U
(91P)	57-74-9 CHLORDANE	.05U
(92P)	50-29-3 4,4'DDT	.01U
(93P)	72-55-9 4,4'DDE	.005U
(94P)	72-54-8 4,4'DDD	.1U
(95P)	115-29-7 ALPHA-ENDOSULFAN	.005U
(96P)	115-29-7 BETA-ENDOSULFAN	.005U
(97P)	1031-07-8 ENDOSULFAN SULFATE	.01U
(98P)	72-20-8 ENDRIN	.005U
(99P)	7421-93-4 ENDRIN ALDEHYDE	.01U
(100P)	76-44-8 HEPTACHLOR	.005U
(101P)	1024-57-3HEPTACHLOR EPOXIDE	.005U
(102P)	319-84-6 ALPHA-BHC	.005U
(103P)	319-85-7 BETA-BHC	.005U
(104P)	319-86-8 DELTA-BHC	.005U
(105P)	58-89-9 GAMMA-BHC (LINDANE)	.005U
106P	53469-21-9PCB-1242	.05U
107P	11097-69-1PCB-1254	.1U
108P	11104-28-2PCB-1221	.1U
109P	11141-16-5PCB-1232	.05U
110P	12672-29-6PCB-1248	.1U
111P	11096-82-5PCB-1260	.1U
112P	12674-11-2PCB-1016	.2U
113P	8001-35-2TOXAPHENE	.05U

0000028

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO. _____ DT147
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____ *AK*

CASE NO.: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 9/26/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 500

PPH	CAS#	UG/L
(21A)	88-06-2 2,4,6-TRICHLOROPHENOL	10
(22A)	59-50-7 P-CHLORO-M-CRESOL	10
(24A)	95-57-8 2-CHLOROPHENOL	10
(31A)	120-83-2 2,4-DICHLOROPHENOL	10
(34A)	105-67-9 2,4-DIMETHYLPHENOL	10
(57A)	88-75-5 2-NITROPHENOL	20
(58A)	100-02-7 4-NITROPHENOL	50
(59A)	51-28-5 2,4-DINITROPHENOL	50
(60A)	534-52-1 4,6-DINITRO-O-CRESOL	20
(64A)	87-86-5 PENTACHLOROPHENOL	10
(65A)	108-95-2 PHENOL	10
	65-85-0 BENZOIC ACID	100
	95-48-7 2-METHYLPHENOL	5
	108-39-4 4-METHYLPHENOL	5
	95-95-4 2,4,5-TRICHLOROPHENOL	100
(1B)	83-32-9 ACENAPHTHENE	10
(5B)	92-87-5 BENZIDINE	40
(8B)	120-82-1 1,2,4-TRICHLOROBENZENE	10
(9B)	118-74-1 HEXACHLOROBENZENE	10
(12B)	67-72-1 HEXACHLOROETHANE	10
(18B)	111-44-4 BIS(2-CHLOROETHYL) ETHER	10
(20B)	91-58-7 2-CHLORONAPHTHALENE	10
(25B)	95-50-1 1,2-DICHLOROBENZENE	10
(26B)	541-73-1 1,3-DICHLOROBENZENE	10
(27B)	106-46-7 1,4-DICHLOROBENZENE	10
(28B)	91-94-1 3,3'-DICHLOROBENZIDINE	20
(35B)	121-14-2 2,4-DINITROTOLUENE	20
(36B)	606-20-2 2,6-DINITROTOLUENE	20
(37B)	122-66-7 1,2-DIPHENYLHYDRAZINE	20
(39B)	206-44-0 FLUORANTHENE	10
(40B)	7005-72-3 4-CHLOROPHENYLPHENYLETHER	10
(41B)	101-55-3 4-BROMOPHENYLPHENYLETHER	10
(42B)	39638-32-9 BIS(2-CHLOROISOPROPYL) ETHER	20
(43B)	111-91-1 BIS(2-CHLOROETHOXY) METHANE	20

PPH	CAS#	UG/L
(52B)	87-68-3 HEXACHLOROBUTADIENE	10
(53B)	77-47-4 HEXACHLOROCYCLOPENTADIENE	10
(54B)	78-59-1 ISOPHORONE	10
(55B)	91-20-3 NAPHTHALENE	10
(56B)	98-95-3 NITROBENZENE	10
(62B)	86-30-6 N-NITROSODIPHENYLAMINE	10
(63B)	621-64-7 N-NITROSODIPROPYLAMINE	10
(66B)	117-81-7 BIS(2-ETHYLHEXYL) PHTHALATE	530
(67B)	85-68-7 BENZYL BUTYL PHTHALATE	3
(68B)	84-74-2 DI-N-BUTYL PHTHALATE	17.4
(69B)	117-84-0 DI-N-OCTYL PHTHALATE	10
(70B)	84-66-2 DIETHYL PHTHALATE	10
(71B)	131-11-3 DIMETHYL PHTHALATE	10
(72B)	56-55-3 BENZO(A)ANTHRACENE	10
(73B)	50-32-8 BENZO(A)PYRENE	20
(74B)	205-99-2 BENZO(B) FLUORANTHENE AND/	20
(75B)	207-08-9 BENZO(K) FLUORANTHENE OR	20
(76B)	218-01-9 CHRYSENE	20
(77B)	208-96-8 ACENAPHTHYLENE	10
(78B)	120-12-7 ANTHRACENE	10
(79B)	191-24-2 BENZO(GHI) PERYLENE	20
(80B)	86-73-7 FLUORENE	10
(81B)	85-01-8 PHENANTHRENE	10
(82B)	53-70-3 DIBENZO(AH)ANTHRACENE	20
(83B)	193-39-5 INDENO(123-CD) PYRENE	20
(84B)	129-00-0 PYRENE	10
	62-53-3 ANILINE	5
	100-51-6 BENZYL ALCOHOL	20
	106-47-8 4-CHLOROANILINE	50
	132-64-9 DIBENZOFURAN	10
	91-57-6 2-METHYLNAPHTHALENE	20
	88-74-4 2-NITROANILINE	100
	99-09-2 3-NITROANILINE	100
	100-01-6 4-NITROANILINE	100

AK

USEPA-SAMPLE MANAGEMENT OFFICE
PO BOX 818 ALEXANDRIA, VA 22313

0000056

SAMPLE NO.
J4548

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO _____ DT148
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____ *WJ*

CASE NO: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

VOLATILES

CONCENTRATION _____ LOW
DATE PREPARED _____ 9/13/84
DATE ANALYZED _____ 9/13/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 0.2

PP#	CASH	UG/L
(2V)	107-02-8ACROLEIN	100U
(3V)	107-13-1ACRYLONITRILE	100U
(4V)	71-43-2BENZENE	5U
(6V)	56-23-2CARBON TETRACHLORIDE	5U
(7V)	108-90-7CHLOROBENZENE	5U
(10V)	107-06-21,2-DICHLOROETHANE	5U
(11V)	71-55-61,1,1-TRICHLOROETHANE	5U
(13V)	75-34-31,1-DICHLOROETHANE	5U
(14V)	79-00-51,1,2-TRICHLOROETHANE	5U
(15V)	79-34-51,1,2,2-TETRACHLOROETHANE	10U
(16V)	75-00-3CHLOROETHANE	10U
(19V)	110-75-82-CHLOROETHYLVINYLETHER	10U
(23V)	67-66-3CHLOROFORM	5U
(29V)	75-35-41,1-DICHLOROETHENE	5U
(30V)	156-60-5TRANS-1,2-DICHLOROETHENE	5U
(32V)	78-87-51,2-DICHLOROPROPANE	10U
(33V)	10061-02-6TRANS-1,3-DICHLOROPROPENE	5U
	10061-01-05CIS-1,3-DICHLOROPROPENE	5U
(38V)	100-41-4ETHYLBENZENE	5U
(44V)	75-09-2METHYLENE CHLORIDE	5U
(45V)	74-87-3CHLOROMETHANE	10U
(46V)	74-83-9BROMOMETHANE	10U
(47V)	75-25-2BROMOFORM	10U
(48V)	75-27-4BROMODICHLOROMETHANE	5U
(49V)	75-69-4FLUOROTRICHLOROMETHANE	5U
(50V)	75-71-80ICHLORODIFLUOROMETHANE	NA
(51V)	124-48-1CHLORODIBROMOMETHANE	5U
(85V)	127-18-4TETRACHLOROETHENE	5U
(86V)	108-88-3TOLUENE	5U
(87V)	79-01-6TRICHLOROETHENE	5U
(88V)	75-01-4VINYL CHLORIDE	10U
	67-64-1ACETONE	5U
	78-93-32-BUTANONE	5U
	75-15-0CARBON DISULFIDE	1U
	519-78-62-HEXANONE	5U
	108-10-14-METHYL-2-PENTANONE	5U
	100-42-5STYRENE	5U
	108-05-4VINYL ACETATE	5U
	1330-20-7TOTAL XYLENES	5U

PESTICIDES

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 10/4/84
PERCENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 10

PP#	CASH	UG/L
(89P)	309-00-2 ALDRIN	.005U
(90P)	60-57-1 DIELDRIN	.005U
(91P)	57-74-9 CHLORDANE	.05U
(92P)	50-29-3 4,4'DDT	.01U
(93P)	72-55-9 4,4'DDE	.005U
(94P)	72-54-8 4,4'DDD	.1U
(95P)	115-29-7 ALPHA-ENDOSULFAN	.005U
(96P)	115-29-7 BETA-ENDOSULFAN	.005U
(97P)	1031-07-8 ENDOSULFAN SULFATE	.01U
(98P)	72-20-8 ENDRIN	.005U
(99P)	7421-93-4 ENDRIN ALDEHYDE	.01U
(100P)	76-44-8 HEPTACHLOR	.005U
(101P)	1024-57-3HEPTACHLOR EPOXIDE	.005U
(102P)	319-84-6 ALPHA-BHC	.005U
(103P)	319-85-7 BETA-BHC	.005U
(104P)	319-86-8 DELTA-BHC	.005U
(105P)	58-89-9 GAMMA-BHC (LINDANE)	.005U
106P	53469-21-9PCB-1242	.05U
107P	11097-69-1PCB-1254	.1U
108P	11104-28-2PCB-1221	.1U
109P	11141-16-5PCB-1232	.05U
110P	12672-29-6PCB-1248	.1U
111P	11096-82-5PCB-1260	.1U
112P	12674-11-2PCB-1016	.2U
113P	8001-35-2TOXAPHENE	.05U

0000057

SAMPLE NO.
J4548

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO. _____ DT148
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____

CASE NO: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 9/26/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 500

PP#	CAS#	UG/L
(21A)	88-06-2 2,4,6-TRICHLOROPHENOL	10
(22A)	59-50-7 P-CHLORO-M-CRESOL	10
(24A)	95-57-8 2-CHLOROPHENOL	10
(31A)	120-83-2 2,4-DICHLOROPHENOL	10
(34A)	105-67-9 2,4-DIMETHYLPHENOL	10
(57A)	88-75-5 2-NITROPHENOL	20
(58A)	100-02-7 4-NITROPHENOL	50
(59A)	51-28-5 2,4-DINITROPHENOL	50
(60A)	534-52-1 4,6-DINITRO-O-CRESOL	20
(64A)	87-86-5 PENTACHLOROPHENOL	10
(65A)	108-95-2 PHENOL	10
	65-85-0 BENZOIC ACID	100
	95-48-7 2-METHYLPHENOL	5
	108-39-4 4-METHYLPHENOL	5
	95-95-4 2,4,5-TRICHLOROPHENOL	100
(1B)	83-32-9 ACENAPHTHENE	10
(5B)	92-87-5 BENZIDINE	40
(8B)	120-82-1 1,2,4-TRICHLOROBENZENE	10
(9B)	118-74-1 HEXACHLOROBENZENE	10
(12B)	67-72-1 HEXACHLOROETHANE	10
(18B)	111-44-4 BIS(2-CHLOROETHYL) ETHER	10
(20B)	91-58-7 2-CHLORONAPHTHALENE	10
(25B)	95-50-1 1,2-DICHLOROBENZENE	10
(26B)	541-73-1 1,3-DICHLOROBENZENE	10
(27B)	106-46-7 1,4-DICHLOROBENZENE	10
(28B)	91-94-1 3,3'-DICHLOROBENZIDINE	20
(35B)	121-14-2 2,4-DINITROTOLUENE	20
(36B)	606-20-2 2,6-DINITROTOLUENE	20
(37B)	122-66-7 1,2-DIPHENYLHYDRAZINE	20
(39B)	206-44-0 FLUORANTHENE	10
(40B)	7005-72-3 4-CHLOROPHENYLPHENYLETHER	10
(41B)	101-55-3 4-BROMOPHENYLPHENYLETHER	10
(42B)	39638-32-9 BIS(2-CHLOROISOPROPYL) ETHER	20
(43B)	111-91-1 BIS(2-CHLOROETHOXY) METHANE	20

PP#	CAS#	UG/L
(52B)	87-68-3 HEXACHLOROBUTADIENE	10
(53B)	77-47-4 HEXACHLOROCYCLOPENTADIENE	10
(54B)	78-59-1 ISOPHORONE	10
(55B)	91-20-3 NAPHTHALENE	10
(56B)	98-95-3 NITROBENZENE	10
(62B)	86-30-6 N-NITROSODIPHENYLAMINE	10
(63B)	621-64-7 N-NITROSODIPROPYLAMINE	10
(66B)	117-81-7 BIS(2-ETHYLHEXYL) PHTHALATE	82.6
(67B)	85-68-7 BENZYL BUTYL PHTHALATE	2.8
(68B)	84-74-2 DI-N-BUTYL PHTHALATE	22.6
(69B)	117-84-0 DI-N-OCTYL PHTHALATE	10
(70B)	84-66-2 DIETHYL PHTHALATE	3.6
(71B)	131-11-3 DIMETHYL PHTHALATE	10
(72B)	56-55-3 BENZO(A)ANTHRACENE	10
(73B)	50-32-8 BENZO(A)PYRENE	20
(74B)	205-99-2 BENZO(B)FLUORANTHENE AND/	20
(75B)	207-08-9 BENZO(K)FLUORANTHENE OR	20
(76B)	218-01-9 CHRYSENE	20
(77B)	208-96-8 ACENAPHTHYLENE	10
(78B)	120-12-7 ANTHRACENE	10
(79B)	191-24-2 BENZO(GHI)PERYLENE	20
(80B)	86-73-7 FLUORENE	10
(81B)	85-01-8 PHENANTHRENE	10
(82B)	53-70-3 DIBENZO(AH)ANTHRACENE	20
(83B)	193-39-5 INDENO(123-CD)PYRENE	20
(84B)	129-00-0 PYRENE	10
	62-53-3 ANILINE	5
	100-51-6 BENZYL ALCOHOL	20
	106-47-8 4-CHLOROANILINE	50
	132-64-9 DIBENZOFURAN	10
	91-57-6 2-METHYLNAPHTHALENE	20
	88-74-4 2-NITROANILINE	100
	99-09-2 3-NITROANILINE	100
	100-01-6 4-NITROANILINE	100

USEPA-SAMPLE MANAGEMENT OFFICE
PO BOX 818 ALEXANDRIA, VA 22313

00000003

SAMPLE NO.
J4549

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO. _____ DT149
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____ *169*

CASE NO.: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

VOLATILES

CONCENTRATION _____ LOW
DATE PREPARED _____ 9/13/84
DATE ANALYZED _____ 9/13/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 0.2

PP#	CAS#	UG/L
(2V)	107-02-8ACROLEIN	100U
(3V)	107-13-1ACRYLONITRILE	100U
(4V)	71-43-2BENZENE	5U
(6V)	56-23-2CARBON TETRACHLORIDE	5U
(7V)	108-90-7CHLOROBENZENE	5U
(10V)	107-06-21,2-DICHLOROETHANE	5U
(11V)	71-55-61,1,1-TRICHLOROETHANE	5U
(13V)	75-34-31,1-DICHLOROETHANE	5U
(14V)	79-00-51,1,2-TRICHLOROETHANE	5U
(15V)	79-34-51,1,2,2-TETRACHLOROETHANE	10U
(16V)	75-00-3CHLOROETHANE	10U
(19V)	110-75-82-CHLOROETHYL VINYLETHER	10U
(23V)	67-66-3CHLOROFORM	5U
(29V)	75-35-41,1-DICHLOROETHENE	5U
(30V)	156-60-5TRANS-1,2-DICHLOROETHENE	5U
(32V)	78-87-51,2-DICHLOROPROPANE	10U
(33V)	10061-02-6TRANS-1,3-DICHLOROPROPENE	5U
	10061-01-05CIS-1,3-DICHLOROPROPENE	5U
(38V)	100-41-4ETHYLBENZENE	5U
(44V)	75-09-2METHYLENE CHLORIDE	12.1 M
(45V)	74-87-3CHLOROMETHANE	10U
(46V)	74-83-9BROMOMETHANE	10U
(47V)	75-25-2BROMOFORM	10U
(48V)	75-27-4BROMODICHLOROMETHANE	5U
(49V)	75-69-4FLUOROTRICHLOROMETHANE	5U
(50V)	75-71-8DICHLORODIFLUOROMETHANE	NA
(51V)	124-48-1CHLORODIBROMOMETHANE	5U
(85V)	127-18-4TETRACHLOROETHENE	5U
(86V)	108-88-3TOLUENE	5U
(87V)	79-01-6TRICHLOROETHENE	5U
(88V)	75-01-4VINYL CHLORIDE	10U
	67-64-1ACETONE	5U
	78-93-32-BUTANONE	5U
	75-15-0CARBON DISULFIDE	1U
	519-78-62-HEXANONE	5U
	108-10-14-METHYL-2-PENTANONE	5U
	100-42-5STYRENE	5U
	108-05-4VINYL ACETATE	5U
	1330-20-7TOTAL XYLENES	5U

PESTICIDES

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 10/4/84
PERCENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 10

PP#	CAS#	UG/L
(89P)	309-00-2 ALDRIN	.005U
(90P)	60-57-1 DIELDRIN	.005U
(91P)	57-74-9 CHLORDANE	.05U
(92P)	50-29-3 4,4'DDT	.01U
(93P)	72-55-9 4,4'DDE	.005U
(94P)	72-54-8 4,4'DDD	.1U
(95P)	115-29-7 ALPHA-ENDOSULFAN	.005U
(96P)	115-29-7 BETA-ENDOSULFAN	.005U
(97P)	1031-07-8 ENDOSULFAN SULFATE	.01U
(98P)	72-20-8 ENDRIN	.005U
(99P)	7421-93-4 ENDRIN ALDEHYDE	.01U
(100P)	76-44-8 HEPTACHLOR	.005U
(101P)	1024-57-3HEPTACHLOR EPOXIDE	.005U
(102P)	319-84-6 ALPHA-BHC	.005U
(103P)	319-85-7 BETA-BHC	.005U
(104P)	319-86-8 DELTA-BHC	.005U
(105P)	58-89-9 GAMMA-BHC (LINDANE)	.005U
106P	53469-21-9PCB-1242	.05U
107P	11097-69-1PCB-1254	.1U
108P	11104-28-2PCB-1221	.1U
109P	11141-16-5PCB-1232	.05U
110P	12672-29-6PCB-1248	.1U
111P	11096-82-5PCB-1260	.1U
112P	12674-11-2PCB-1016	.2U
113P	8001-35-2TOXAPHENE	.05U

0000010

SAMPLE NO.
J4549

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME _____ PEDCO ENV.
LAB SAMPLE ID NO _____ DT149
SAMPLE MATRIX _____ WATER
DATA RELEASE AUTHORIZED _____ *A9*

CASE NO: _____ 3206
QC REPORT NO. _____
CONTRACT NO. _____ 68-01-6779
DATE SAMPLE RECEIVED _____ 9/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION _____ LOW
DATE EXTRACTED _____ 9/13/84
DATE ANALYZED _____ 9/26/84
PER CENT MOISTURE _____ N/A
CONCENTRATION/DIL. FACTOR _____ 500

PP#	CASH	UG/L
(21A)	88-06-2 2,4,6-TRICHLOROPHENOL	10
(22A)	59-50-7 P-CHLORO-M-CRESOL	10
(24A)	95-57-8 2-CHLOROPHENOL	10
(31A)	120-83-2 2,4-DICHLOROPHENOL	10
(34A)	105-67-9 2,4-DIMETHYLPHENOL	10
(57A)	88-75-5 2-NITROPHENOL	20
(58A)	100-02-7 4-NITROPHENOL	50
(59A)	51-28-5 2,4-DINITROPHENOL	50
(60A)	534-52-1 4,6-DINITRO-O-CRESOL	20
(64A)	87-86-5 PENTACHLOROPHENOL	10
(65A)	108-95-2 PHENOL	10
	65-85-0 BENZOIC ACID	100
	95-48-7 2-METHYLPHENOL	5
	108-39-4 4-METHYLPHENOL	5
	95-95-4 2,4,5-TRICHLOROPHENOL	100
(1B)	83-32-9 ACENAPHTHENE	10
(5B)	92-87-5 BENZIDINE	40
(8B)	120-82-1 1,2,4-TRICHLOROBENZENE	10
(9B)	118-74-1 HEXACHLOROBENZENE	10
(12B)	67-72-1 HEXACHLOROETHANE	10
(18B)	111-44-4 BIS(2-CHLOROETHYL) ETHER	10
(20B)	91-58-7 2-CHLORONAPHTHALENE	10
(25B)	95-50-1 1,2-DICHLOROBENZENE	10
(26B)	541-73-1 1,3-DICHLOROBENZENE	10
(27B)	106-46-7 1,4-DICHLOROBENZENE	10
(28B)	91-94-1 3,3'-DICHLOROBENZIDINE	20
(35B)	121-14-2 2,4-DINITROTOLUENE	20
(36B)	606-20-2 2,6-DINITROTOLUENE	20
(37B)	122-66-7 1,2-DIPHENYLHYDRAZINE	20
(39B)	206-44-0 FLUORANTHENE	10
(40B)	7005-72-3 4-CHLOROPHENYLPHENYLETHER	10
(41B)	101-55-3 4-BROMOPHENYLPHENYLETHER	10
(42B)	39638-32-9 BIS(2-CHLOROISOPROPYL) ETHER	20
(43B)	111-91-1 BIS(2-CHLOROETHOXY) METHANE	20

PP#	CASH	UG/L
(52B)	87-68-3 HEXACHLOROBUTADIENE	10
(53B)	77-47-4 HEXACHLOROCYCLOPENTADIENE	10
(54B)	78-59-1 ISOPHORONE	10
(55B)	91-20-3 NAPHTHALENE	10
(56B)	98-95-3 NITROBENZENE	10
(62B)	86-30-6 N-NITROSODIPHENYLAMINE	10
(63B)	621-64-7 N-NITROSODIPROPYLAMINE	10
(66B)	117-81-7 BIS(2-ETHYLHEXYL) PHTHALATE	20.4
(67B)	85-68-7 BENZYL BUTYL PHTHALATE	10
(68B)	84-74-2 DI-N-BUTYL PHTHALATE	9.2
(69B)	117-84-0 DI-N-OCTYL PHTHALATE	10
(70B)	84-66-2 DIETHYL PHTHALATE	10
(71B)	131-11-3 DIMETHYL PHTHALATE	10
(72B)	56-55-3 BENZO(A) ANTHRACENE	10
(73B)	50-32-8 BENZO(A) PYRENE	20
(74B)	205-99-2 BENZO(B) FLUORANTHENE AND/	20
(75B)	207-08-9 BENZO(K) FLUORANTHENE OR	20
(76B)	218-01-9 CHRYSENE	20
(77B)	208-96-8 ACENAPHTHYLENE	10
(78B)	120-12-7 ANTHRACENE	10
(79B)	191-24-2 BENZO(GHI) PERYLENE	20
(80B)	86-73-7 FLUORENE	10
(81B)	85-01-8 PHENANTHRENE	10
(82B)	53-70-3 DIBENZO(AH) ANTHRACENE	20
(83B)	193-39-5 INDENO(123-CD) PYRENE	20
(84B)	129-00-0 PYRENE	10
	62-53-3 ANILINE	5
	100-51-6 BENZYL ALCOHOL	20
	106-47-8 4-CHLOROANILINE	50
	132-64-9 DIBENZOFURAN	10
	91-57-6 2-METHYLNAPHTHALENE	20
	88-74-4 2-NITROANILINE	100
	99-09-2 3-NITROANILINE	100
	100-01-6 4-NITROANILINE	100

[Handwritten signature]

CONTRACTOR PEDCo Environmental
MED. LEVEL

CONTRACT NO. 68-01-6779
HIGH LEVEL _____
OTHER (Specify) _____

LOW LEVEL _____
WATER _____
OC REPORT NO. _____

-----Volatile-----	-----Semi-Volatile-----	Pesticide	Dioxin
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

[illegible]

★★ Advisory Limit

Comments:

Volatiles: $\frac{0}{11}$ out of $\frac{18}{36}$; outside of QC limits
Semi-Volatiles: $\frac{11}{2}$ out of $\frac{36}{44}$; outside of QC limits
Pesticides: $\frac{2}{2}$ out of $\frac{44}{44}$; outside of QC limits

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 3206
 LOW LEVEL ✓
 WATER ✓
 QC REPORT NO.

CONTRACTOR PEI Assoc
 MED. LEVEL
 SOIL/SED.

CONTRACT NO. 65-01-6779
 HIGH LEVEL
 OTHER (Specify)
 UNITS (Circle) ug/Kg ug/l

FRACTION	COMPOUND	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS*		COMMENTS
								RPD	RECOVERY	
VOA SMD # <u>J4548</u>	1,1-Dichloroethylene	49.9	57.2	115	59.8	120	4	<15%	51-151	
	Trichloroethylene	55.4	64.5	116	65.4	118	7	<15%	74-128	
	Chlorobenzene	42.3	59.2	140*	61.3	152*	8	<15%	67-131	
	Toluene	42.1	52.3	124	51.7	123	7	<15%	58-132	
	Benzene	41.7	44.9	108	45.0	108	0	<15%	56-132	
B/N SMD # <u>J4548</u>	1,2,4-Trichlorobenzene	51.7	11.4	22*	40.4	78	112*	<50%	38-108	
	Acenaphthene	50.3	22.1	44*	55.4	110	96*	<50%	57-115	
	2,4-Dinitrotoluene	52.2	4.0	8*	15.8	30*	116*	<50%	43-113	
	Di-N-Butylphthalate	69.5	14.6	21	39.8	57	92*	<50%	13-113	
	Pyrene	65.0	50.4	78	109.9	168*	93*	<50%	25-137	
	N-Nitrosodi-N-Propylamine	56.1	10.8	19*	38.8	69	114*	<50%	34-114	
	1,4-Dichlorobenzene	60.7	11.6	19*	45.0	75	119*	<50%	33-103	
	Pentachlorophenol	101.2	9.6	9*	11.8	12*	29	<40%	19-123	
ACID SMD # <u>J9548</u>	Phenol	103.8	46.9	45	16.8	16*	93*	<40%	23-81	
	2-Chlorophenol	110.9	74.8	68	22.8	21*	104*	<40%	33-107	
	P-Chloro-M-Cresol	100.8	19.0	19*	8.2	8*	81*	<40%	32-108	
	4-Nitrophenol	100.8	0	0*	0	0*	0	<40%	15-93	
	Lindane	12.6	12.5	99	12.3	98	7	<40%	87-107	
PEST SMD # <u>J2271</u>	Heptachlor	9.9	7.8	78	7.9	79	7	<40%	43-125	
	Aldrin	10.8	10.0	92	9.9	91	7	<40%	45-109	
	Dieldrin	10.1	10.7	106	10.0	99	7	<40%	56-122	
	Endrin	10.4	9.5	91	9.0	86	5	<40%	89-101	
	p,p-DDT	10.1	8.8	87	8.2	81	6	<40%	82-102	

*Asterisked values are outside QC limits.

RPD: VOAs 0 out of 5; outside QC limits
 B/N 2 out of 2; outside QC limits
 ACID 3 out of 3; outside QC limits
 PEST 0 out of 6; outside QC limits

RECOVERY: VOAs 2 out of 10; outside QC limits
 B/N 7 out of 14; outside QC limits
 ACID 8 out of 10; outside QC limits
 PEST 0 out of 12; outside QC limits

*Date Limits Set 12/82
 Revision Due 6/83

Case No.

REAGENT BLANK SUMMARY

Case No.

5206

Contractor

PEI Assoc

Contract No.

68-01-6779

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSLTIC OR UNKNOWN)	CONC.	UNITS	CRDL
VOABCK0913	9-13	VIA	W	L	T		methylhexyl chloride	9.6	mg/L	5
							Acetone	11.3	"	10
							2-Butanone	5.0	"	10
BVABCK0926	9-26	BVA	W	L	R		Bis(2-ethylhexyl) phthalate	17.8	µg/L	10
PestBck	10-4	PE	W	L	V		NONE			

Comments:

Bill Jess (513) 782-4700
Pedco Environmental, Inc.
11499 Chester Rd.
Cincinnati, OH. 45246

In Reference to Case No(s):

3206

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 11/8/84
Laboratory Name: Pedco Env. Inc.
Lab Contact: Bill Jess
Region: 10
Regional Contact: Jim Farr
Call Initiated By: Laboratory ☒ Region

In reference to data for the following sample number(s):

T2271, 74548, 74549

Summary of Questions/Issues Discussed:

1) missing DFTPP mass spectrum
It appeared to be problems with surrogate recoveries
and matrix spike recoveries for BAM fraction
There didn't appear to be any attempt at retraction
or at least it wasn't acknowledged.

Summary of Resolution:

1) will send missing spectra
2) no hits for any of the analytes therefore no
repeat analysis.

Signature

James F. Farr

Date

11/8/84

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

APPENDIX B

SAMPLE DOCUMENTATION
RESOURCE RECOVERY CORPORATION, PASCO, WASHINGTON
CASE NO.: 3206
SITE INSPECTION - 9/12/84
ECOLOGY AND ENVIRONMENT, INC., SEATTLE

APPENDIX B - SAMPLE DOCUMENTATION

FI- 108408 -22

Resource Recovery Corp.

Case No.: 3206

Location Number	Latitude/Longitude	STORE Station Number	Sample Containers	Date and Time	Custody Form Number	Sample Lab. Number	Sample Type (grab)	Means of Preservation	Analysis Requested	Destination
Control Well	46° 45' 00" 119° 02' 30"	05A013	2 ½-gal. jars	9/12/84 10:30	10-1282	J 4548	Aqueous	Iced	Extractable Organics	Pedco
			2 40-ml. vials	9/12/84 10:30	10-1282	J 4548	(Grab)	Iced	Volatile Organics	Pedco
			2 1-liter Poly bottles	9/12/84 10:30	10-1283	MJ 9043	Aqueous (Grab)	NaOH HNO ₃	Cyanide Heavy Metals	Chem Tech Chem Tech
Well #3	46° 45' 00" 119° 02' 30"	05A014	2 ½-gal. jars	9/12/84 14:30	10-1282	J 2271	Aqueous	Iced	Extractable Organics	Pedco
			2 40-ml. vials	9/12/84 14:30	10-1282	J 2271	(Grab)	Iced	Volatile Organics	Pedco
			2 1-liter Poly bottles	9/12/84 14:30	10-1283	MJ 9045	Aqueous (Grab)	NaOH HNO ₃	Cyanide Heavy Metals	Chem Tech Chem Tech
Transfer	-----	-----	2 ½-gal. jars	9/12/84 10:15	10-1282	J 4549	Aqueous	Iced	Extractable Organics	Pedco
Blank			2 40-ml. vials	9/12/84 10:15	10-1282	J 4549	(Grab)	Iced	Volatile Organics	Pedco
			2 1-liter Poly bottles	9/12/84 10:15	10-1283	MJ 9044	Aqueous (Grab)	NaOH HNO ₃	Cyanide Heavy Metals	Chem Tech Chem Tech

APPENDIX C

SITE INSPECTION REPORT FORM
9/12/84

RESOURCE RECOVERY CORPORATION
PASCO, WASHINGTON
COMPILED BY
ECOLOGY AND ENVIRONMENT, INC.
SEATTLE, WASHINGTON



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE WA 02 SITE NUMBER WAD991281874

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Resource Recovery Corporation		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER Kahlotus Rd. & Hwy 12				
03 CITY Pasco		04 STATE WA	05 ZIP CODE 99301	06 COUNTY Franklin	07 COUNTY CODE 021	08 CONG DIST 05
09 COORDINATES LATITUDE 46 15 07.0 LONGITUDE 119 03 13.5		10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN				

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 9 / 12 / 84 MONTH DAY YEAR	02 SITE STATUS <input checked="" type="checkbox"/> ACTIVE <input type="checkbox"/> INACTIVE	03 YEARS OF OPERATION as a hazardous waste site, 1972 to 1980 1956 I Present UNKNOWN BEGINNING YEAR ENDING YEAR	
04 AGENCY PERFORMING INSPECTION (Check all that apply) <input type="checkbox"/> A. EPA <input checked="" type="checkbox"/> B. EPA CONTRACTOR E & F <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR <input checked="" type="checkbox"/> E. STATE <input type="checkbox"/> F. STATE CONTRACTOR <input type="checkbox"/> G. OTHER (Name of firm) (Specify)			

05 CHIEF INSPECTOR Peter Evers	06 TITLE Environmental Chemist	07 ORGANIZATION E&E	08 TELEPHONE NO. (206) 624-9537
09 OTHER INSPECTORS Rich Brooks	10 TITLE Biologist	11 ORGANIZATION E&E	12 TELEPHONE NO. (206) 624-9537
Mike Gallagher	Environmentalist II	WDOE	(206) 753-2353
			()
			()
			()

13 SITE REPRESENTATIVES INTERVIEWED Larry Dietrich, Pasco Sanitary Landfill	14 TITLE Owner/Operator	15 ADDRESS 420 E. Ainsworth	16 TELEPHONE NO. (509) 547-4802
John Zillich, Engineering	Project Mgr.	J.U.B. Engineers, Inc.	(509) 783-2144
Consultant to Above.		N.W. Crossing Offiec #201	()
		2810 W. Clearwater Ave.	()
		Kennewick, WA 99336	()
			()

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 8:00 a.m.	19 WEATHER CONDITIONS Sunny & Warm
---	------------------------------------	---------------------------------------

IV. INFORMATION AVAILABLE FROM

01 CONTACT Debbie Flood	02 OF (Agency/Organization) EPA		03 TELEPHONE NO. (206) 442-2722	
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM Christopher M. Nadler	05 AGENCY EPA/FIT	06 ORGANIZATION E & E	07 TELEPHONE NO. (206) 624-9537	08 DATE 12/12/84 MONTH DAY YEAR



<input checked="" type="checkbox"/> A. TOXIC	<input checked="" type="checkbox"/> E. SOLUBLE	<input checked="" type="checkbox"/> I. HIGHLY VOLATILE
<input checked="" type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> F. INFECTIOUS	<input type="checkbox"/> J. EXPLOSIVE
<input type="checkbox"/> C. RADIOACTIVE	<input checked="" type="checkbox"/> G. FLAMMABLE	<input checked="" type="checkbox"/> K. REACTIVE
<input checked="" type="checkbox"/> D. PERSISTENT	<input checked="" type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> L. INCOMPATIBLE
		<input type="checkbox"/> M. NOT APPLICABLE

EPA FORM 2070-13 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

None observed. However, accusations were made in 1973 over the site accepting 2,4-D and MCPA wastes which are toxic to local crops (grapevines).

01 ☒ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include names of species)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☒ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

None observed.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
(Spills/Runoff/Standing liquids, Leaking drums)
03 POPULATION POTENTIALLY AFFECTED: <100

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Hazardous wastes were disposed in unlined bottom trenches. Wind is eroding the soils covering the trenches.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed. Unknown if these systems are in this area.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

None observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None known.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 8,523

IV. COMMENTS

Due to the nature of wastes disposed of and method of disposal at the site, periodic inspection should be carried out for leakage from disposal areas.

V. SOURCES OF INFORMATION (See specific references, e. g., State files, Sample analysis reports)

EPA Files, Seattle, WA
WDOE Files, Olympia, WA
E&E water sampling on 9/12/84



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
WA WAD991281874

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☒ OBSERVED (DATE: 9/12/84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100 04 NARRATIVE DESCRIPTION

Analysis of groundwater samples collected during E&E site inspection revealed levels of barium (1,631 µg/l), beryllium (7 µg/l), chromium (706 µg/l), lead (160 µg/l), and nickel (162 µg/l) above the EPA recommended levels.

01 ☒ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 04 NARRATIVE DESCRIPTION

No observed release. It appears that due to lack of surface waters and lack of rain, little potential exist for surface water contamination.

01 ☒ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION

No observed release. Local farmers and residents expressed concern over burial of 2,4-D and MCPA wastes and their effects on local grapevines.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION

No documented evidence of threat.

01 ☒ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION

No reported incidents. Site is not fenced and could be accessible to trespassers. WDOE, however, relieved site of a fencing requirement due to "lack of problems experienced without one". Operator's residence is on site.

01 ☒ F. CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION
(Acres)

The liquid wastes were disposed of in unlined trenches. The ground water samples which were collected 9/12/84 revealed heavy metal contamination, therefore the potential exists for soil contamination.

01 ☒ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: >100 04 NARRATIVE DESCRIPTION

None observed. Concern however, for potential seepage from septic disposal area laterally migrating to hazardous waste areas. Also concern for unlined disposal sites leaking into water table aquifer.

01 ☒ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: <10 04 NARRATIVE DESCRIPTION

None observed. Disposal area coverings are eroding and potential for worker exposure although slight, is possible.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <100 04 NARRATIVE DESCRIPTION

None observed. Potential for significant population exposure is slight due to wastes being buried, lack of open evaporation ponds and remote location. However, due to lack of fencing around facility results in uncontrolled access.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input checked="" type="checkbox"/> G. STATE (Specify)	5301	3/21/73		state waste discharged permit
<input type="checkbox"/> H. LOCAL (Specify)				for Resource Recovery Corp.
<input checked="" type="checkbox"/> I. OTHER (Specify) State	CUP 82-6			conditional use permit for
<input type="checkbox"/> J. NONE				Pasco Sanitary Landfill.

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input checked="" type="checkbox"/> A. SURFACE IMPOUNDMENT	unknown		<input type="checkbox"/> A. INCENERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE
<input checked="" type="checkbox"/> B. PILES	unknown		<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input type="checkbox"/> C. DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	
<input type="checkbox"/> D. TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input type="checkbox"/> F. LANDFILL			<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input checked="" type="checkbox"/> H. OTHER Evaporation (Specify)	
<input checked="" type="checkbox"/> I. OTHER drums below ground unknown (Specify)				

08 AREA OF SITE

Approx. 250 (acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Chloro-alkali sludge has been stored in unlined ponds. Barium sludges with mercury are buried in a total lined (4mil polyethylene) trench. Other hazardous wastes have been buried with only a 4mil polyethylene top liner. Sewage wastes are disposed of in an unlined pond.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE. ☒ YES ☐ NO
02 COMMENTS

Site is not fence, but in a remote area.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

WDOE FILES, OLYMPIA, WA
EPA FILES, SEATTLE, WA



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
WA WAD991291974

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as appropriate)	02 STATUS	03 DISTANCE TO SITE												
<table><tr><td>SURFACE</td><td>WELL</td></tr><tr><td>COMMUNITY A. <input checked="" type="checkbox"/></td><td>B. <input type="checkbox"/></td></tr><tr><td>NON-COMMUNITY C. <input type="checkbox"/></td><td>D. <input checked="" type="checkbox"/></td></tr></table>	SURFACE	WELL	COMMUNITY A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>	NON-COMMUNITY C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	unknown <table><tr><td>ENDANGERED A. <input type="checkbox"/></td><td>AFFECTED B. <input type="checkbox"/></td><td>MONITORED C. <input type="checkbox"/></td></tr><tr><td>D. <input type="checkbox"/></td><td>E. <input type="checkbox"/></td><td>F. <input type="checkbox"/></td></tr></table>	ENDANGERED A. <input type="checkbox"/>	AFFECTED B. <input type="checkbox"/>	MONITORED C. <input type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	A. 3.5 (mi) B. onsite (mi)
SURFACE	WELL													
COMMUNITY A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>													
NON-COMMUNITY C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>													
ENDANGERED A. <input type="checkbox"/>	AFFECTED B. <input type="checkbox"/>	MONITORED C. <input type="checkbox"/>												
D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>												

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)				
<input type="checkbox"/> A. ONLY SOURCE FOR DRINKING <input checked="" type="checkbox"/> B. DRINKING (Other sources available) COMMERCIAL INDUSTRIAL IRRIGATION (No other water sources available) <input type="checkbox"/> C. COMMERCIAL INDUSTRIAL IRRIGATION (Limited other sources available) <input type="checkbox"/> D. NOT USED, UNUSEABLE				
02 POPULATION SERVED BY GROUND WATER		03 DISTANCE TO NEAREST DRINKING WATER WELL		
unknown		onsite (mi)		
04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
55 (ft)	SW (assumed)	55 (ft)	unknown (gpd)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

09 DESCRIPTION OF WELLS (Including usage, depth, and location relative to population and buildings)

The on-site well provides drinking water for the owner's residence. Other wells around site provide irrigation water.

10 RECHARGE AREA	11 DISCHARGE AREA
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
COMMENTS	COMMENTS
	only through groundwater wells.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)		
<input checked="" type="checkbox"/> A. RESERVOIR, RECREATION DRINKING WATER SOURCE <input type="checkbox"/> B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES <input type="checkbox"/> C. COMMERCIAL, INDUSTRIAL <input type="checkbox"/> D. NOT CURRENTLY USED		
02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER		
NAME:	AFFECTED	DISTANCE TO SITE
Snake River	<input type="checkbox"/>	2.7 (mi)
Columbia River	<input type="checkbox"/>	3.1 (mi)
	<input type="checkbox"/>	

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN	02 DISTANCE TO NEAREST POPULATION						
<table><tr><td>ONE (1) MILE OF SITE</td><td>TWO (2) MILES OF SITE</td><td>THREE (3) MILES OF SITE</td></tr><tr><td>A. 34 NO. OF PERSONS</td><td>B. 1,090 NO. OF PERSONS</td><td>C. 10,640 NO. OF PERSONS</td></tr></table>	ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE	A. 34 NO. OF PERSONS	B. 1,090 NO. OF PERSONS	C. 10,640 NO. OF PERSONS	on-site (mi)
ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE					
A. 34 NO. OF PERSONS	B. 1,090 NO. OF PERSONS	C. 10,640 NO. OF PERSONS					
03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING						
278	0.8 (mi)						

05 POPULATION WITHIN VICINITY OF SITE. (Provide narrative description of nature of population within vicinity of site. e.g., rural, village, densely populated urban area)

The area is sparsely populated and agricultural for about 1 mile from site. From 1 to 2 miles, it is suburbs in the direction of Pasco (southwest) and agricultural in the other directions. From 2 to 3 miles, it is urban in the direction of Pasco and agricultural in other directions.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE WA 02 SITE NUMBER WAD991281874

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

Basalt

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK

Approx. 140 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

unknown (ft)

05 SOIL pH

unknown

06 NET PRECIPITATION

-32.0 (in)

07 ONE YEAR 24 HOUR RAINFALL

TWD

0.8 (in)

08 SLOPE

SITE SLOPE

1-3 %

DIRECTION OF SITE SLOPE

W-SW

TERRAIN AVERAGE SLOPE

3-5 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

10

N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

A. N/A (mi)

McNary Wildlife
OTHER Refuge

B. 3.0 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

Not within one (mi)

ENDANGERED SPECIES:

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

1.0 mile to S.E.

A. 2.0 mile west

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVES

B. 1.5 (mi)

AGRICULTURAL LANDS
PRIME AG LAND

C. 0.0 (mi) D. (mi)

AG LAND

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located in an area similar to Karst topography, in that the area is relatively flat with numerous closed depressions. In a 1.0 mile radius, the topography is a large depression/bowl, with the general land surface raising to the Northeast (elev. 508 feet) and lowering to the Southwest (elev. 340 feet). Over a two mile distance

VII. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis, reports)

U.S.G.S. Pasco 7.5 minute Quadrangle

Uncontrolled hazardous waste site ranking system users Manual August 1982.

Basalt Waste Isolation Project Annual Report Fiscal year 1980, RHO-BWI-80-100, document prepared for U.S. Department of Energy under contract DE-AC06-77RL01030 by Rockwell International.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	3	Organics-Pedco Environmental, Inc.	
SURFACE WATER		Cincinnati, OH	Attached
WASTE		Inorganics-Chem Tech New York, NY	To Report
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
None	

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>Ground-E&E Aerial-Soil Survey</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>E&E; EPA</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

E&E Site Inspection 9/12/84
E&E Site Inspection Report 12/14/84



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. CURRENT OWNER(S)

PARENT COMPANY (if applicable)

01 NAME Larry Dietrich			02 D+B NUMBER			08 NAME			09 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 420 E. Ainsworth			04 SIC CODE			10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE								
05 CITY Pasco			06 STATE WA			07 ZIP CODE 99301			12 CITY			13 STATE			14 ZIP CODE		
01 NAME			02 D+B NUMBER			08 NAME			09 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			12 CITY			13 STATE			14 ZIP CODE		
01 NAME			02 D+B NUMBER			08 NAME			09 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			12 CITY			13 STATE			14 ZIP CODE		
01 NAME			02 D+B NUMBER			08 NAME			09 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			12 CITY			13 STATE			14 ZIP CODE		
01 NAME			02 D+B NUMBER			08 NAME			09 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			12 CITY			13 STATE			14 ZIP CODE		

III. PREVIOUS OWNER(S) (List most recent first)

IV. REALTY OWNER(S) (if applicable; list most recent first)

01 NAME John Dietrich			02 D+B NUMBER			01 NAME			02 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.) P.O. Box 650			04 SIC CODE			03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE								
05 CITY Pasco			06 STATE WA			07 ZIP CODE 99301			05 CITY			06 STATE			07 ZIP CODE		
01 NAME			02 D+B NUMBER			01 NAME			02 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			05 CITY			06 STATE			07 ZIP CODE		
01 NAME			02 D+B NUMBER			01 NAME			02 D+B NUMBER								
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE			03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE								
05 CITY			06 STATE			07 ZIP CODE			05 CITY			06 STATE			07 ZIP CODE		

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Files, Seattle, WA
Personal Communication with Larry Dietrich 9/25/84 and 12/12/84.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. CURRENT OPERATOR (Provide if different from owner)

OPERATOR'S PARENT COMPANY (If applicable)

01 NAME Pasco Sanitary Landfill	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 420 E. Ainsworth	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE		
05 CITY Pasco	06 STATE WA	07 ZIP CODE 99301	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1982-Present	09 NAME OF OWNER Larry Dietrich				

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME Resource Recovery Corp.	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 5501 Airport Way South	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE		
05 CITY Seattle	06 STATE WA	07 ZIP CODE 98108	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1972-1981	09 NAME OF OWNER DURING THIS PERIOD John Kimberly, President				
01 NAME John Dietrich	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.) P.O. Box 650	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE		
05 CITY Pasco	06 STATE WA	07 ZIP CODE 99301	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1956-1972	09 NAME OF OWNER DURING THIS PERIOD Same				
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE		
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Files, Seattle, WA
Personal Communication with Larry Dietrich 9/25/84 and 12/12/84



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
WA WAD991281874

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
Chemical Processors, Inc. Ron West		Weyerhaeuser Company			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
5501 Airport Way South		P.O. Box 188			
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Seattle	WA	98108	Longview	WA	98632
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
Chevron Chemical Co.		Rhone Ponlenc Chemical Co.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
P.O. Box 3883		6200 N.W. St. Helens Rd.			
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
San Francisco	CA	94119	Portland	OR	97210

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
Basin Disposal Inc.					
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
1210 S. Grey (P.O. Box 650)					
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Pasco	WA	99301			
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER		
Kennewick Disposal Co.		Resource Recovery Corp.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		
1611 S. Washington St. PO Box 6088		5501 Airport Way South			
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Kennewick	WA	99336	Seattle	WA	98108

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Erris Files, Notification of Hazardous Waste Site (EPA Form 8900-1)
Personal Communication w/ Larry Dietrich 9/25/84



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
WA WAD991281874

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ D. SPILLED MATERIAL REMOVED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ E. CONTAMINATED SOIL REMOVED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☒ F. WASTE REPACKAGED
04 DESCRIPTION

02 DATE 1973

03 AGENCY _____

Chloro-alkali sludge was moved from an unlined lagoon to a lined lagoon.

01 ☐ G. WASTE DISPOSED ELSEWHERE
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ H. ON SITE BURIAL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ I. IN SITU CHEMICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ J. IN SITU BIOLOGICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ K. IN SITU PHYSICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ L. ENCAPSULATION
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ M. EMERGENCY WASTE TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ N. CUTOFF WALLS
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ P. CUTOFF TRENCHES/SUMP
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ Q. SUBSURFACE CUTOFF WALL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE WA 02 SITE NUMBER WAD991281874

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ S. CAPPING/COVERING
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ T. BULK TANKAGE REPAIRED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ U. GROUT CURTAIN CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ V. BOTTOM SEALED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ W. GAS CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ X. FIRE CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ Y. LEACHATE TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ Z. AREA EVACUATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ 1. ACCESS TO SITE RESTRICTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ 2. POPULATION RELOCATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

01 ☐ 3. OTHER REMEDIAL ACTIVITIES
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

WDOE Site Files, Olympia



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE WA	02 SITE NUMBER WAD991281874
----------------	--------------------------------

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

3-17-84 Recommendation of enforcement action-problems with sewage handling practices.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

WDOE Site Files, Olympia, WA

APPENDIX D

PHOTOGRAPHIC DOCUMENTATION

RESOURCE RECOVERY CORPORATION
PASCO, WASHINGTON

SITE INSPECTION - 9/12/84

COMPILED BY
ECOLOGY AND ENVIRONMENT, INC.
SEATTLE, WASHINGTON

0

PHOTO IDENTIFICATION SHEET

Type of Camera: Nikon FM

TDD No.: 10-8408-22

Type of Film: Kodachrome

Resource Recovery Corporation, Pasco WA

EPA No.: _____

Photo No.	Date	Time	Taken by	Description of Photo
1	9/12/84	0750	Rich Brooks	Entrance Gate taken in N-NW direction
2	"	0830	" "	Waste Disposal Area A - taken in S direction
3	"	0835	" "	Waste Disposal Area C&D - taken in E direction
4	"	0840	" "	Waste Disposal Area C&D - taken in E direction
5	"	0845	" "	Waste Disposal Area C&D - taken in E direction
6	"	0850	" "	Dry Well - taken in SW direction
7	"	0855	" "	Waste Disposal Area E & Dry Well - taken in NE direction
8	"	0900	" "	Waste Disposal Area E - taken in NW direction
9	"	0905	" "	Sewage Lagoons - taken in E direction
10	"	0910	" "	Waste Disposal Area B - taken in E direction
11	"	0915	" "	Waste Disposal Area B & Sensor - taken in N direction
12	"	0920	" "	Wide Angle of Whole Site - taken in S direction

PHOTO IDENTIFICATION SHEET

Type of Camera: Nikon FM

TDD No.: 10-8408-22

Type of Film: Kodachrome

Resource Recovery Corporation, Pasco WA EPA No.:

[illegible]